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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,211	08/24/2001	Daniel Lootz	7040-40	3319

21324 7590 03/29/2005

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EXAMINER

THALER, MICHAEL H

ART UNIT PAPER NUMBER

3731

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/939,211	Applicant(s) LOOTZ ET AL.	
	Examiner Michael Thaler	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1,5,6,8-10,12-18,20,44,64,67,70,71,74-78,81,82,85,86,89,90,94,100 and 105-122 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/9/04, 4/13/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims pending in the application are 1,5,6,8-10,12-18,20,44,64,67,70,71,74-78,81,82,85,86,89,90,94,100 and 105-122.

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The disclosure is objected to because of the following informalities: In claim 105, line 7, "element" should be "elements". In claim 114, line 14, "bars" should be "bar". Appropriate correction is required.

Claims 114-122 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 114, line 17, it is unclear if "the longitudinal direction" refers to the claimed first longitudinal direction, the claimed second longitudinal direction or some other longitudinal direction. Claims 121 and 122 are indefinite for the same reasons.

Claims 1, 5, 6, 8-10, 12-18, 20, 44, 64, 67, 70, 71, 74-78, 81, 82, 85, 86, 89, 90, 94, 100 and 105-122 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duerig et al. (6,190,406) in view of Brown et al. (2002/0007212). Duerig et al. disclose a plurality of annular support portions 52 comprising bar elements 60 and connecting bars 70, wherein the connecting bars 70 engage in a region of the bar elements of the first annular support portion that projects in the longitudinal direction (in the embodiment described in col. 5, lines 46-53 in which one end is attached to the strut rather than the loop, noting that the entire strut projects in the longitudinal

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direction particularly in view of [0060] of applicant's specification which indicates that a portion of the bar element "projects less far in the first direction") and wherein the connecting bars engage a central portion of the second annular support portion (in the embodiment described in col. 5, lines 46-53 in which the other end is attached to the strut rather than the loop). Duerig et al. fail to disclose a direction of curvature changing in the central region of the bar element when the stent is in the first condition. However, Brown et al. in figure 9, teach that the central region of a meandering bar element of a stent in the first, unexpanded condition, should be curved (A close inspection of figure 9 reveals the central region of each meandering bar element as being curved. That is, each bar element of the V-shaped bar is curved from the apex of the V and thus is curved in one direction and then changes direction at the central region of the bar element about midway between the apexes. For example, the bar element that extends from the end of the lead line for left most reference numeral 744 in figure 9 curves from the apex near the lead line towards the right and then changes direction at the central region of the bar element about midway between the apexes to curve towards the left). This shape has the advantage of enabling peaks of different amplitudes to be formed in the stent (paragraph

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[0066]) providing more support to the blood vessel along the edges of the meandering bar element. It would have been obvious to incorporate this shape into the Duerig et al. bar element so that it too would have this advantage. Note that the Brown et al. bar element has a direction of curvature which changes in the central region between two turning points and also has limbs of a V-shape as claimed. As to claim 5, in the embodiment described in col. 5, lines 46-53 in which one end of the connecting bar 70 is attached to the strut rather than the loop, the connecting bars 70 engage the strut "near a turning point" as claimed since "near" is a relative term and any point on the strut is "near a turning point" as compared to other portions of the stent, for example. As to claims 6 and 114, Duerig et al. disclose an embodiment in which one end of the connecting bar 70 is attached to a strut and the other end is attached to a loop, noting the term "and/or" in reference to each end of the connecting bar in the phrase "wherein one end is attached to one strut and/or loop, and another end attached to a strut and/or loop on an adjacent hoop" in col. 5, lines 46-53. In this embodiment, the end of the connecting bar 70 that is attached to a loop "engages a point that projects furthest in the longitudinal direction" as claimed, since figures 4 and 4a show the end of the connecting bar 70 attached to a loop at a point

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which projects furthest in the longitudinal direction even though it is attached slightly off center to the apex of the loop. In any event, the "point that projects furthest in the longitudinal direction" is considered to be the "turning point" which is considered to be the entire curved portion near the apex. As to claims 10, 105 and 121, note col. 7, lines 39-60 of Duerig et al. As to claim 16, for example, Duerig et al. fail to disclose the stent material in a stress-induced martensitic state at body temperature. However, it is old and well known in this art to design make shape memory alloys such that they are in a stress-induced martensitic state at body temperature in order to facilitate entry into the patient's body. It would have been obvious to make the Duerig et al. the stent material in a stress-induced martensitic state at body temperature so that it too would have this advantage. The above well known in the art statement is taken to be admitted prior art because applicant failed to traverse the examiner's assertion (M.P.E.P. 2144.03). As to claims 18, 85, 86, 90 and 119, the width of the Duerig et al. bar element varies over the length thereof (col. 6, lines 8-39). As to claims 94 and 100, the center line of the Duerig et al. bar element is in the shape of an elliptical arc in the region of the turning points when the stent is expanded, as seen in figure 5, for example. Also, Brown et al. disclose

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an elliptical arc in the region of the turning points (paragraph [0017])).

Applicant's arguments with respect to claims 1, 5, 6, 8-10, 12-18, 20, 44, 64, 67, 70, 71, 74-78, 81, 82, 85, 86, 89, 90, 94, 100 and 105-122 have been considered but are moot in view of the new ground(s) of rejection. Note that Brown et al. (2002/0007212) disclose the claimed curvature when the stent is in the first condition as now claimed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Thaler whose telephone number is (571)272-4704. The examiner can normally be reached Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571)272-4963. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

mht
3/24/05



MICHAEL THALER
PRIMARY EXAMINER
ART UNIT 3731